

## ABSTRACT

In order to improve comfortable conditions of an elevator passenger car which are deteriorated by changes in gravity and vibrations since the elevator passenger car is rapidly decelerated, a speed control method and a speed control apparatus are provided which are capable of increasing floor arriving precision even when a set value of an arbitrary frequency is changed. In a speed control method of an elevator-purpose inverter in which an induction motor (5) is controlled in an acceleration manner, a constant speed manner, and a deceleration manner by an open loop control type inverter; and when an elevator passenger car (8) reaches a deceleration starting position located at a constant distance from an arriving floor position, the elevator passenger car (8) is decelerated in a constant deceleration speed in the deceleration control manner,

when the induction motor (5) is stopped, an elevating distance when the elevator passenger car (8) is decelerated from a reference frequency up to a leveling frequency in a constant deceleration speed is previously calculated; the elevator passenger car (8) is driven in a constant speed at an intermediate frequency in such a manner that the previously calculated distance becomes equal to an elevating distance when the elevator passenger car (8) is decelerated at the constant deceleration speed from an arbitrary frequency up to the leveling frequency so as to adjust the elevating distance; and thereafter, the elevator passenger car (8) is automatically decelerated at the constant deceleration speed up to the leveling frequency.